IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Before the Board of Patent Appeals and Interferences

Applicant	:	Walt Singleton
Serial No.	:	10/725,154
Filed	:	December 1, 2003
For	:	A Document Generation System and User Interface for Producing a User Desired Document
Examiner	:	Michael K. Botts
Art Unit	:	2176

APPEAL BRIEF

May It Please The Honorable Board:

Appellants appeal the Final Rejection dated October 5, 2006 of Claims 1-17 of the above-identified application. The fee of five hundred dollars ($500.00) for filing this Brief and any associated extension fee is to be charged to Deposit Account No. 19-2179. Enclosed is a single copy of this Brief.

Please charge any additional fee or credit any overpayment to the above-identified Deposit Account.

Appellants do not request an oral hearing.

I. REAL PARTY IN INTEREST

The real party in interest of Application Serial No. 10/725,154 is the Assignee of record:

Siemens Medical Solutions Health Services Corporation

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II. RELATED APPEALS AND INTERFERENCES

There are currently, and have been, no related Appeals or Interferences regarding Application Serial No. 10/725,154 known to the undersigned attorney.

III. STATUS OF THE CLAIMS

Claims 1-17 are rejected and the rejection of claims 1 - 17 are appealed.

IV. STATUS OF AMENDMENTS

There were no amendments made after Final Rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 1 provides a document generation system (Fig. 1 and page 1, line 29 to page 2, line 7) for producing a document from information derived from an information repository. The system includes a source of code (Fig. 1, 105 and page 3, lines 13-15) representing a document template (Fig. 2, 200 and page 3, lines 26-31), including data fields (Fig. 2, 201-206 and page 1, line 32 to page 2, line 3) containing placeholder items (Fig. 2, 207-208 and page 3, lines 27-31) to be replaced by desired data items (Fig. 4, 401-406 and page 3, lines 27-31)and also including a repetition identifier (Fig. 2, 209-211 and page 2, lines 2-3) indicating one of the data fields is to be replicated to provide a group of data fields to be replaced by a plurality of the desired data items. A source of document generation control information (Fig. 1, 106 and page 3, line 31 to page 4, line 1) supports insertion of the desired data items derived from the information repository in the data fields. A document processor

(Fig. 1, 102, page 3, lines 19-24 and page 4 lines 1-3) applies the control information in replacing template document data field placeholder items with desired data items, to produce a generated document (Fig. 1, 110 and page 3, lines 25-26).

Dependent claim 2 includes all the features of independent claim 1 along with additional features that the control information (Fig. 1, 106 and page 3, line 31 to page 4, line 1) contains at least one of (page 6, lines 14-15), (a) an identification of data fields in the template document available to be replaced by desired data items (page 6, lines 15-16) (b) an identification of a location in the information repository of a desired data item associated with an individual data field (page 6, lines 16-18), and (c) an identification of a location in the information repository of a first data item for insertion in the individual data field of the group of data fields and data items sequentially linked to the first data item are inserted in remaining data fields of the group of data fields (page 6, lines 18-21).

Dependent claim 3 includes all the features of dependent claim 2 along with additional features that the location identifier of the first data item comprises an Extensible Markup Language compatible XPath value (page 6, lines 21-23).

Dependent claim 4 includes all the features of independent claim 1 along with additional features that a data source file associating data field names of the document template with a data location in an information repository comprises at least one of a comma delimited file (page 8, lines 16-18) and a flat file.

Dependent claim 5 includes all the features of independent claim 1 along with additional features that the repetition identifier comprises a Rich Text Format (RTF) compatible Bookmark (Fig. 2, 200 and page 6, lines 24-25).

Dependent claim 6 includes all the features of independent claim 1 along with additional features that the code representing the document template is at least one of word processing application compatible (page 7, lines 19-22) and Rich Text Format (RTF) compatible (Fig. 8 and page 6, lines 11-13).

Dependent claim 7 includes all the features of independent claim 1 along with additional features that the document processor processes template document data, excluding the desired data items inserted in the placeholder items, by incorporating the template document data in the generated document and the generated document is compatible with Extensible Stylesheet Language (XSL) (Fig. 5 and page 6, lines 26-29).

Dependent claim 8 includes all the features of independent claim 1 along with additional features that the generated document comprises one or more of (a) an SGML document, (b) an XML document, (c) an HTML document, and (d) a multimedia file (page 6, lines 29-32).

Dependent claim 9 includes all the features of independent claim 1 along with additional features that the desired data items derived from the information repository are Extensible Markup Language (XML) compatible data items derived from an XML compatible document (Fig. 6 and page 6, line 32 to page 7, line 2).

Dependent claim 10 includes all the features of independent claim 1 along with additional features that the document processor processes template document data in Rich Text Format (RTF) together with desired data items derived from the information repository in Extensible Markup Language (XML) to provide the generated document in an Extensible Stylesheet Language (XSL) format (page 7, lines 3-6).

Dependent claim 11 includes all the features of dependent claim 10 along with additional features that the document processor includes an XML parser to process the generated document in Extensible Stylesheet Language (XSL) format to provide a processed document in Rich Text Format (RTF) (Fig. 7 and page 7, lines 7-10).

Dependent claim 12 includes all the features of independent claim 1 along with additional features that the document processor examines the document template to identify an individual data field containing a placeholder item and incorporate a link in the individual data field identifying a corresponding item enabling locating one of the desired data items in the information repository for insertion in the individual data field (page 7, lines 11-16).

Independent claim 13 provides a graphical user interface system (Fig. 1, 103 and page 3, lines 15-18) supporting adaptive generation of a document comprising an image generator (Fig. 1, 107 and page 3, lines 21-23) for generating at least one image window (page 4, lines 5-8). The at least one image window includes an image element enabling user selection of a text processing application compatible document template (Fig. 2, 220 and page 4, lines 8-9). The document template includes data fields containing placeholder items to be replaced by desired data items, and also includes a repetition identifier indicating one of the data fields is to be

replicated to provide a group of data fields to be replaced by a plurality of the desired data items (page 4, lines 9-13). An image element initiates examination (Fig. 1, 109 and page 4, lines 13-15) of the document template to identify an individual data field and insert a desired data item derived from an information repository in the data field to produce a generated document.

Dependent claim 14 provides a method for adaptively producing a document from information derived from an information repository (page 4, lines 16-18), by examining text processing application compatible code representing a document template. The document template includes data fields containing placeholder items to be replaced by desired data items, and also includes a repetition identifier indicating one of the data fields is to be replicated to provide a group of data fields to be replaced by a plurality of the desired data items (page 4, lines 19-24). Control information supporting insertion of the desired data items derived from the information repository is applied in the data fields to replace template document data field placeholder items with desired data items to produce a generated document (page 4, lines 24-27).

Independent claim 15 provides a method for adaptively producing a document. A text processing application compatible electronic document template (Fig. 2, 200 and page 4, lines 28-30) is received including data fields (Fig. 2, 201-206 and page 4, lines 20-21) having placeholder items and at least one repetition identifier (Fig. 2, 209-211 and page 2, lines 2-3) indicating at least one of the data fields that is to be replicated (Fig. 7, 401-406 and page 4, lines 22-24). Data items are received and the electronic document template is merged with the data items to produce the document responsive to replacing placeholder items with the data items (Fig. 6 and page 4, lines 30-32), and responsive to replicating the at least one of the data fields

that is to be replicated to provide a group of data fields to be replaced by a plurality of the desired data items.

Dependent claim 16 includes all the features of independent claim 15 along with the additional features that the step of merging is performed by at least one of, XSL compatible code (page 5, lines 18-20) and a mail merge application program (page 7, line 31 – page 8, line 2).

Dependent claim 17 includes all the features of independent claim 15 along with the additional features that a selection of text processing application compatible electronic document templates is received (page 3, lines 19-21) and a selection of a source of data items is received (Fig. 7, 401-406 and page 4, lines 24-27).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claim 13 is rejected under 35 USC 112, First Paragraph as failing to comply with the written description requirement.

Claims 1-17 are rejected under 35 USC 103(a) as being unpatentable over Marchal, B., "Applied XML Solutions, The Authoritative Solution," Sam's, 2000, and further in view of Muench, S., "Building Oracle XML Applications," O'Reilly & Associates, 2000.

VII. ARGUMENT

Claim 13 is fully enabled by the specification and particularly point out and distinctly claim the subject matter regarded as the present invention as required under 35 USC 112, first paragraph. Therefore, reversal of the Final Rejection (hereinafter "rejection") of claim 13 under 35 USC 112, first paragraph is respectfully requested.

Furthermore, Marchal in view of Muench does not make claims 1-17 unpatentable. Thus, reversal of the rejection of claims 1-17 under 35 U.S.C. § 103(a) is respectfully requested. Reversal of the Final Rejection (hereinafter termed "rejection") of claims 1-17 under 35 U.S.C. § 103(a) is respectfully requested.

Overview of the Cited References

Marchal authored "Applied XML Solutions, The Authoritative Solution." Applied XML Solutions shows professional developers how to apply XML to a variety of real-world applications, including: XML as a scripting substitute, using RSS to syndicate content to multiple and non-traditional browsers such as WAP-enabled handheld devices, using XSLT to facilitate communication between incompatible systems, separating web content from web code, importing data from various file formats.

Muench authored the book "Building Oracle XML Applications." Building Oracle XML Applications provides Java and PL/SQL developers with a detailed look at the many tools Oracle has provided to support XML development, such as the Oracle XML Parser, the Oracle XML SQL Utility, and the XSQL Servlet.

Rejection of Claim 13 under 35 USC 112, First Paragraph

The Office Action states that claim 13 contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Applicants respectfully disagree. The addition of "text processing application compatible" document template is not new matter and is further described in the specification in paragraphs [0018], [0020] to [0022], [0032], [0035], [0047] and Fig. 2 of the present claimed invention. More specifically, these paragraphs state an image element enables user selection of a document template. The document template is text processing application compatible. Paragraph [0020] describes one example of a text (or word) processing application compatible document; Microsoft Word.RTM (report template). Paragraph [0032] and Fig. 2 describe a Rich Text Format (RTF) compatible template file 200, another example of a text processing application compatible document. According to claim 13, a user may select other types of text processing application compatible document templates than the ones listed. Therefore, Applicants respectfully submit that no new matter has been added with the previous claim amendment of claim 13 and thus, it is respectfully submitted that the rejection has been satisfied and should be withdrawn.

Rejection of Claims 1-17 under 35 USC 103(a)

over Marchal in view of Muench

Marchal in view of Muench does not make claims 1-17 unpatentable. Thus, reversal of the Final Rejection (hereinafter termed "rejection") of claims 1-17 under 35 U.S.C. § 103(a) is respectfully requested.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596, 1598 (Fed.Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (CCPA 1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion, or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed.Cir. 1988), *cert. denied*, 488 U.S. 825 (1988); *Ashland Oil Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 28, 293, 227 USPQ 657, 664 (Fed.Cir. 1985), *cert. denied*, 475 U.S. 1017 (1986); *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed.Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a *prima facie* case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed.Cir. 1992).

CLAIM 1

Marchal alone, or in combination with Muench, fails to provide any 35 USC 112 compliant enabling disclosure of the features claimed in independent claim 1. Specifically, Marchal with Muench fail to show or suggest "a source of code representing a document template including, data fields containing placeholder items to be replaced by desired data items, and also including a repetition identifier indicating one of said data fields is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data

items" as recited in claim 1 of the present invention. The claim 1 system enables a user armed simply with knowledge of Microsoft Word or rich Text Format-RTF to create a customized document layout or form without having extensive programming knowledge in XML and XSL. Specifically, the "document generation system 100 advantageously eliminates the need for a proprietary report writer system...since users trained in a standard word processing package such as Microsoft Word automatically have the knowledge necessary to work with the preferred report templates 200" (Application page 5 lines 5-10). This is achieved by advantageously allowing the creating and editing of document templates in Word or in RTF (Application page 5 lines 13-14). Further, the "RTF file is provided as input to a program that converts the RTF, shown in FIG. 2, into an Extensible Stylesheet Language (XSL) file, as shown in FIG. 5" (Application page 5 lines 14-16). Marchal with Muench fail to provide a system able to perform the claimed features.

Marchal and Muench fail to show or suggest "a source of code representing a document template including, data fields containing placeholder items to be replaced by desired data items, and also including a **repetition identifier** indicating one of said data fields is to be **replicated** to provide a group of data fields to be replaced by a plurality of said desired data items" as recited in claim 1 of the present invention. Marchal with Muench also fails to show or suggest this feature in combination with "document generation control information supporting insertion of said desired data items derived from said information repository in said data fields" and a "document processor for applying said control information in replacing template document data field placeholder items with desired data items, to produce a generated document" as recited in claim 1 of the present invention.

Marchal on pages 71-102, cited in the Office Action, describes creating electronic forms with an editor for the purpose of collecting data. Marchal further describes writing XML code to generate documents. Figures 3-8 and 3-11, cited by the Office Action, merely show forms generated by the code in listings 3.4 and 3.5, respectively. The code is written by a programmer and when the XML page is loaded, the result is a form that can be filled out by a user. Marchal does not mention or suggest a repetition identifier that indicates one of the data fields is to be replicated to provide a group of data fields to be replaced by a plurality of desired data items as in the present claimed invention. This is correctly admitted in the Office Action on page 5. Marchal does not derive information from an information repository as in the present claimed invention. Rather, Marchal merely provides an XML form that is created and which manually receives information from a user (see Marchal, Fig. 3.1, Fig. 3.2, Fig. 3.8 and pages 72-74). This is wholly unlike the present claimed invention which derives information from an **information repository.** Creating a manually fillable form as in Marchal is NOT producing a document from information derived from an information repository as in the present claimed invention. Therefore, the XML document and editor described by Marchal neither discloses nor suggests "[a] document generation system for producing a document from information derived from an information repository, comprising ... data fields containing placeholder items to be replaced by desired data items, and also including a repetition identifier indicating one of said data fields is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items" as recited in claim 1 of the present invention.

In the Response to Applicants Arguments, the Office Action asserts that Marchal "teaches a source of document generation control information supporting insertion of the desired data items from an information repository" on pages 71-102, particularly pages 73-84.

Applicants respectfully disagree. On page 72 of the cited passage, Marchal describes creating forms with an editor such as a newspaper converting paper forms into electronic forms. Pages 73-84 of Marchal specifically show "Creating a Form with an Editor" and "Running the Project." To create a form with an editor, Marchal describes code that a programmer can use to create customized electronic forms. The programmer writes the XML code in an XML editor using markup language. The programmer may create a programming template and then customize the form as desired. For example, for the given example of converting paper forms into electronic, the programmer would create fields in a form to be filled out by a user. When the project is run, the output shows items that can be filled out by a user. This is shown in Fig. 3.4 of Marchal which shows the fields "Name" and "Location". The user sees only this output and can click on the entity "Name" to type in "Book Fair" and the entity "Location" to type in "Exhibition Center, Namur" (see page 77). Although Marchal describes source code for a programmer to incorporate into the creation of a form and having a user manually filling the created form, Marchal does not mention or suggest a "source of document generation control information" or an "information repository" as in the present claimed invention. Marchal merely allows a programmer to encode a form using XML and a user to fill out the created form. This is wholly unlike the present claimed invention which uses a "source of document generation control information" that "support[s] insertion of ... desired data items derived from" an "information repository in ... [the] data fields." Therefore, Marchal (with Muench) neither discloses nor suggests a "source of document generation control information supporting insertion of said desired data items derived from said information repository in said data fields" as recited in claim 1 of the present invention.

Additionally, the Office Action citing pages 71-102, particularly pages 73-84, further asserts that "Marchal also teaches a document processor for applying the control information in replacing template document data field placeholder items with desired data items to produce a generated document." Applicants respectfully disagree. The system described by Marchal does not contain a document processor for applying the control information as in the present claimed invention. Marchal merely allows a user to fill forms by entering information into a document and does not replace template document data field **placeholder** items with desired data items as in the present invention. The Marchal system, in which a user fills out an electronic form, is wholly unlike the present claimed invention in which the document processor applies "control information in replacing template document data field placeholder items with desired data items, to produce a generated document." Merely having a user manually fill out forms with information is not equivalent to "a document processor for applying ... [the] control information in replacing template document data field placeholder items with desired data items to produce a generated document" as recited in the present claimed invention.

As stated on page 5 of the Office Action, Marchal neither discloses nor suggests the use of "repetition identifiers" which "indicat[es] one of said data fields is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items". The Office Action contends that Marchal with Muench create a form template that handles repeating data items for the obvious and beneficial purpose of expanding a form template such that it handles repeating data. Applicants respectfully disagree. Muench describes sorting and grouping already created stored data in an XML document. Muench merely sorts by "string or number values" as described on pages 375-378. Although Muench describes the "scan all

preceding" (page 380) technique which checks the current element among preceding elements, Muench does not disclose or suggest a "repetition identifier" as claimed in the present invention. Furthermore, on pages 383-387, Muench also describes avoiding the scanning and rescanning method to perform a query. Sorting by string or number values, as described in Muench, performs the same results as the "scan all preceding" method within a shorter amount of time. However, performing a sort, as described by Muench, is not the same as the present claimed invention which discloses a repetition identifier indicating that one of the data fields is to be replicated to provide a group of data fields to be replaced by multiple desired data items when producing a document. The repetition identifier, as described in the figures and specification of the present invention, "indicat[es] that one of the data fields 201-206 is to be replicated to provide a group of data fields 201-206 to be replaced by multiple desired data items 401-406" (page 3, lines 30-31). Thus, the repetition identifier indicates that a data field containing code for insertion of information such as "First Name," "Last Name," "Age," etc. (see Fig. 2) is to be replicated to provide a group of data fields which are replaced by multiple desired data items. Thus, the present claimed invention creates a document and replaces data fields, identified with a repetition identifier, with multiple desired data items. An example can be seen in Fig. 4 of the present invention. Muench is wholly unlike the present claimed invention as Muench is not concerned with replacing data fields with multiple desired data items. Muench merely sorts and groups items in a previously created document and does not mention or suggest creating a new document containing a repetition identifier as in the present claimed invention. Therefore, Muench with Marchal neither disclose nor suggest "a repetition identifier indicating one of said data field is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items" as recited in claim 1 of the present invention.

The sections of Muench relied on include pages 375-387, 433-499 and particularly pages 470-475. Muench on pages 470-475 merely shows processing of an XML datagram comprising a source of nested repeating data. This nowhere mentions or suggests use of "a repetition identifier" indicating "data fields" to be "replicated to provide a group of data fields to be replaced by a plurality" of "desired data items" in "code representing a document template including, data fields containing placeholder items to be replaced by desired data items" as recited in the present claimed invention. The sections relied on nowhere show use of a "repetition identifier" driving replication of "data fields" to be replaced by a plurality of "desired data items" in "code representing a document template including, data fields containing placeholder items to be replaced by desired data items" as recited in the present claimed invention. The Muench XML datagram is a **source** of repeating data and does NOT suggest use of a "repetition identifier" initiating **creation** of repeating data as claimed ("one of said data fields is to be replicated to provide a group of data fields") as in the present claimed invention. Similarly, pages 375-387 of Muench discuss using an XSL stylesheet for grouping and sorting of **already created** data and do NOT suggest use of a "repetition identifier" initiating **creation** of repeating data. Thus, the sorting of data already created as in Muench is wholly unlike the present claimed invention which discloses "a repetition identifier" that may initiate the creation of repeating data. Furthermore, Muench on pages 433-499 discusses processing and storing XML datagrams. Muench (with Marchal) nowhere mentions or suggests use of "a repetition identifier" indicating "data fields" to be "replicated to provide a group of data fields to be replaced by a plurality" of "desired data items" in "code representing a document template including, data fields containing placeholder items to be replaced by desired data items" as recited in claim 1 of the present invention.

It is the claim 1 arrangement that advantageously enables use of word processing applications or RTF compatible document templates that are understandable by non-programmers in creation of a customized form by a non-programmer user. The claim 1 arrangement is not shown or suggested in the references when taken alone or combined. On the contrary, the two references (Marchal and Muench) are purely programmer reference guides which inherently teach the use of complex programming language. It is precisely the need of prior art form creation systems, for the programming skills taught by the Marchal and Muench references, that the claimed arrangement seeks to avoid. The combined references nowhere recognize the advantages of the claimed arrangement or the problem it addresses or provide any other reason or motivation for providing the claimed arrangement. Rather, the cited references teach the use of complex programming and skills in form creation that are in direct conflict with the purpose and function of the claimed arrangement.

The Office Action recognizes on page 5 and page 14 that Marchal does not show or suggest use of "a repetition identifier indicating one of said data fields is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items." However, the Office Action contradicts the above in the Response to Arguments (Office Action, page 15) which asserts that Marchal teaches code for a repetition identifier on pages 71-102, Fig. 7.7 and 7.8 and pages 208-214. Applicants respectfully submit that Marchal on page 76 mentions an XML Data Type Definition (DTD) for use in **validating** input data meets repeated data elements requirements, such DTD based **validation** does NOT suggest use of a "repetition identifier" for initiating **creation** of repeating data. As described above, the Marchal reference fails to show or suggest the features of the present claimed invention. Thus,

Marchal does not show or suggest use of "a repetition identifier indicating one of said data fields is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items." The Rejection also erroneously states it would be obvious to combine features of Muench with Marchal to produce the claimed arrangement.

The combination of the Muench XML datagram source of nested repeating data with the Marchal XML programming capabilities as suggested in the Rejection would result in a system requiring an experienced programmer capable of writing XML customized code using a specific XML datagram of nested repeating source data to provide a specific customized document. The combined system would allow users to enter information data into the document for purposes such as entering ordering information into an online shopping cart and sort or group similar items. However, the combined system would not provide a repetition identifier that indicates one of the data fields is to be replicated to provide a group of data fields to be replaced by a plurality of desired data items as in the present claimed invention. The combined system does not even address the need for a repetition identifier, as in the present claimed invention. Thus, the combined system does not provide (or suggest) a "document generation system" enabling a non-programmer user to adaptively produce a document by using a "repetition identifier" to generate a "replicated" group of "data fields to be replaced" in a "document template" by "desired data items" as in claim 1 of the present invention. Consequently withdrawal of the Rejection of claim 1 under 35 USC 103(a) is respectfully requested.

In view of the above remarks, Applicants respectfully submit that Marchal and Muench, when taken alone or in combination, provide no 35 USC 112 compliant enabling disclosure

that make independent claim 1 unpatentable. Therefore, Applicants further respectfully submit that this rejection has been satisfied and should be withdrawn.

CLAIM 2

Dependent claim 2 is considered to be patentable based on its dependence on claim 1 and it is respectfully submitted that this claim is allowable for the same reasons as discussed above regarding claim 1. Claim 2 is also considered to be patentable because Marchal with Muench does not show (or suggest) "a document processor for applying" "control information in replacing template document data field placeholder items" of "replicated" "data fields" with desired data items, to produce a generated document" in which the "control information contains at least one of, (a) an identification of data fields in said template document available to be replaced by desired data items, (b) an identification of a location in said information repository of a desired data item associated with an individual data field, and (c) an identification of a location in said information repository of a first data item for insertion in said individual data field of said group of data fields and data items sequentially linked to said first data item are inserted in remaining data fields of said group of data fields."

The Office Action states that Marchal teaches the identification of data fields in the template document available to be replaced by desired data items on pages 71-102, Figures 7.7 and 7.8, and pages 208-214. Applicants respectfully disagree. Page 209 of Marchal shows how a JavaScript-based editor is used to generate orders. When the order is ready to be sent, the coded script in listing 7.8 "writes the corresponding XML document in a hidden field of the form. The content of the form is posted to the server by the Web browser and, of course, includes the hidden field and XML document" (page 214, first three lines). Marchal does not

describe control information, and nowhere in the code or the output of Marchal is there an identification of data fields in the template document available to be replaced by desired data items from an information repository as in the present claimed invention. Furthermore, Marchal in Figures 7.7 and 7.8 only shows editors for editing source code and sample results and pages 208 to 214 discuss writing e-commerce server code all of which, unlike the claimed arrangements require extensive programming background and knowledge. Figure 7.7 of Marchal shows editing a style sheet by dragging and dropping elements and Figure 7.8 shows the editor used to create and edit purchase orders. Figure 7.8 displays a shopping cart-like image which may be implemented for a user when entering ordering information. This is wholly unlike the present claimed invetion which recites control information that may contain "an identification of data fields in said template document available to be replaced by desired data items." The above sections of Marchal, either alone or in combination with Muench, have no specific relevance to the claimed arrangment. Thus, Marchal with Muench neither disclose nor suggest the features of claim 2 of the present invention.

In view of the above remarks, Applicants respectfully submit that Marchal and Muench, when taken alone or in combination, provide no 35 USC 112 compliant enabling disclosure that make dependent claim 2 unpatentable. Therefore, Applicants further respectfully submit that this rejection has been satisfied and should be withdrawn.

CLAIM 3

Dependent claim 3 is considered to be patentable based on its dependence on claims 1 and 2, and it is respectfully submitted that this claim is allowable for the same reasons as discussed above regarding claims 1 and 2. Claim 3 is also considered to be patentable because

Marchal with Muench does not show (or suggest) a system involving a "location identifier" of a "first data item" "for insertion in said individual data field of said group of data fields and data items sequentially linked to said first data item are inserted in remaining data fields of said group of data fields" in which the "first data item comprises an Extensible Markup Language compatible XPath value" as recited in the present claimed invention.

The Office Action cites pages 330-336, particularly pages 333-336, of Marchal as teaching the use of XPath to select elements in a source XLM document. Although Marchal describes that XPath select elements in the source XML document, Marchal is not concerned with a location identifier of the first data item comprising an XML compatible XPath value as in the present claimed invention. Marchal merely describes XML and XSL elements for allowing programmers to create templates. However, coding a template as in Marchal is wholly unlike the present claimed invention which contains a location identifier of a first data item for insertion in the individual data field of a group of data fields and data items sequentially linked to the first data item are inserted in remaining data fields of the group of data fields in which the first data item comprises an Extensible Markup Language compatible XPath value. Moreover, coding a template is performed by a programmer and is wholly unlike the present claimed invention which allows any user to generate a document without the need to code complicated templates.

Furthermore, Muench merely mentions XPath capability and the mere mentioning of XPath capability found in Muench nowhere mentions or suggests such a combination of features and the specific use of an XPath function. Muench, similar to Marchal, does not mention or suggest a location identifier, as in the present claimed invention and thus, Muench

and Marchal does not disclose or suggest that the "location identifier of said first data item comprises an Extensible Markup Language compatible XPath value." Therefore, Marchal and Muench, when taken alone or in combination, neither disclose nor suggest the "system according to claim 2, wherein said location identifier of said first data item comprises an Extensible Markup Language compatible XPath value" as recited in claim 3 of the present invention.

In view of the above remarks, Applicants respectfully submit that Marchal and Muench, when taken alone or in combination, provide no 35 USC 112 compliant enabling disclosure that make dependent claim 3 unpatentable. Therefore, Applicants further respectfully submit that this rejection has been satisfied and should be withdrawn.

CLAIM 4

Dependent claim 4 is considered to be patentable based on its dependence on claim 1, and it is respectfully submitted that this claim is allowable for the same reasons as discussed above regarding claim 1. Claim 4 is also considered to be patentable because Marchal with Muench does not show (or suggest) a system including "a data source file associating data field names of said document template with a data location in an information repository, said data source file comprising at least one of, (a) a comma delimited file and (b) a flat file."

The Office Action argues that Marchal, on pages 165-194, teaches tokenizing input files, which parses comma delimited and flat files is the same as the present claimed invention. Applicants respectfully disagree. Rather, Marchal merely describes exporting XML-based documents to other applications and importing non-XML documents in XML applications.

Although Marchal describes a tokenizer that breaks input files into its constituents, the tokenizer does not disclose or suggest a data source file comprising at least one of a comma delimited file and a flat file as in the present claimed invention. The tokenizer of Marchal, which is completely unrelated to the present invention, separates special characters such as +, :, ', and ? from regular text. The parser then receives the pre-digested input from the tokenizer and assembles them in a higher-level construct (page 168, "Architecture of the Parser"). This allows the import of non-XML documents into XML applications. Marchal does not even mention or suggest a comma delimited file, as the only characters allowed in EDIFACT syntax are +, :, ', and ? (page 171, "Writing the Tokenizer"). Nowhere in Marchal is there mention or suggestion of separating files by commas, as in the present claimed invention. Additionally, Muench does not provide any 35 USC 112 compliant enabling disclosure of different file types such as (a data source file comprising of either) a comma delimited file or a flat file as in the present claimed invention. Thus, Marchal with Muench, either taken individually or in combination, neither discloses nor suggests "a data source file comprising at least one of ... a comma delimited file and ... a flat file" as in claim 4 of the present invention.

Furthermore, in Marchal and Muench, when taken alone or in combination, there is no mention of a document template with a data location in an information repository, as in the present claimed invention. The combination of Muench XML datagram source of nested repeating data with the Marchal XML programming capabilities as suggested in the Office Action would result in a system requiring an experienced programmer capable of writing XML customized code using a specific XML datagram of nested repeating data to provide a specific customized document. The combined system would allow users to enter information data into the document for purposes such as entering ordering information into an online shopping cart

and sort or group similar items. The combined system would allow exporting and importing of XML and non-XML documents and conversions of documents needed for importation or exportation. However, the combined system would **not** provide or suggests a "data source file" that associates "data field names of [the] document template with a data location in an information repository," where the "data source file compris[es] at least one of ... a comma delimited file and ... a flat file" as in the present claimed invention. Thus, Marchal with Muench, when taken individually or in combination, neither discloses nor suggests "[t]he system according to claim 1, including a data source file associating data field names of said document template with a data location in an information repository, said data source file comprising at least one of (a) a comma delimited file and (b) a flat file" as recited in claim 4 of the present invention.

In view of the above remarks, Applicants respectfully submit that Marchal and Muench, when taken alone or in combination, provide no 35 USC 112 compliant enabling disclosure that make dependent claim 4 unpatentable. Therefore, Applicants further respectfully submit that this rejection has been satisfied and should be withdrawn.

CLAIM 5

Dependent claim 5 is considered to be patentable based on its dependence on claim 1, and it is respectfully submitted that this claim is allowable for the same reasons as discussed above regarding claim 1. Claim 5 is also considered to be patentable because Marchal with Muench does not show (or suggest) a system involving a "repetition identifier" that "comprises a Rich Text Format (RTF) compatible Bookmark." Marchal, on pages 129-166, contrary to the rejection statement, nowhere mentions or suggests (conversion of an XML document to RTF,

inherently including) conversion of XML bookmarks and repetition identifiers to RTF. Although the above cited pages of Marchal describe converting XML documents to many formats, including RTF, there is no mention or suggestion of bookmarks or a repetition identifier as in the present claimed invention. The Office Action agrees by recognizing on page 5 and page 14 (Response to Applicants Arguments) that Marchal does not show or suggest use of "a repetition identifier..." Muench, similar to Marchal, when taken individually or in combination with Marchal, also fails to show or suggest a repetition identifier. Muench describes sorting and grouping already created stored data in an XML document. Muench merely sorts by "string or number values" as described on pages 375-378. Although Muench describes the "scan all preceding" (page 380) technique which checks the current element among preceding elements, Muench does not disclose or suggest a "repetition identifier" as claimed in the present invention. Furthermore, on pages 383-387, Muench also describes avoiding the scanning and rescanning method to perform a query. Sorting by string or number values, as described in Muench, performs the same results as the "scan all preceding" method within a shorter amount of time. However, performing a sort, as described by Muench, is not the same as the present claimed invention which discloses a repetition identifier comprising a Rich Text Format (RTF) compatible bookmark. Therefore, Muench and Marchal, when taken individually or in combination, neither disclose nor suggest a "repetition identifier" comprising "a Rich Text Format (RTF) compatible Bookmark" as recited in claim 5 of the present invention.

Furthermore, Applicants respectfully disagree with the Office Action which states that RTF compatible bookmarks are inherently included in Marchal. Marchal, on pages 129-166 merely describes exporting XML documents to other applications. In Marchal, conversion of

XML to non-XML formats is necessary for exporting, as described in the codes and examples on pages 129-166. Marchal does not at all mention or suggest bookmarks. Simply mentioning XML to RTF conversions, as in Marchal, does not inherently include RTF compatible bookmarks, as in the present claimed invention. The inclusion of an RTF compatible bookmark in a repletion identifier is not inherent in Marchal and is a feature of the present claimed invention. Therefore, Muench and Marchal, when taken individually or in combination, neither disclose nor suggest a "repetition identifier" comprising "a Rich Text Format (RTF) compatible Bookmark" as recited in claim 5 of the present invention.

In view of the above remarks, Applicants respectfully submit that Marchal and Muench, when taken alone or in combination, provide no 35 USC 112 compliant enabling disclosure that make dependent claim 5 unpatentable. Therefore, Applicants further respectfully submit that this rejection has been satisfied and should be withdrawn.

CLAIM 6

Dependent claim 6 is considered to be patentable based on its dependence on claim 1, and it is respectfully submitted that this claim is allowable for the same reasons as discussed above regarding claim 1. Claim 6 is also considered to be patentable because Marchal (on pages 129-166) with Muench does not show (or suggest) a system in which "said code representing said document template is at least one of, (a) word processing application compatible and (b) Rich Text Format (RTF) compatible." As previously explained, the claimed arrangement advantageously enables use of word processing applications or RTF compatible document templates that is understandable by non-programmers in creation of a customized form by a non-programmer user. This capability is not shown or suggested in the

combined references. On the contrary, the two references (Marchal and Muench) are purely programmer reference guides which inherently teach the use of complex programming language. It is precisely the need of prior art form creation systems for the programming skills taught by the Marchal and Muench references that the claimed arrangement seeks to avoid. The combined references nowhere recognize the advantages of the claimed arrangement or the problem it addresses or provide any other reason or motivation for providing the claimed arrangement. Rather, the cited references teach the use of complex programming and skills in form creation that are in direct conflict with the purpose and function of the claimed arrangement. Use of an XML document template as suggested by the Rejection on page 7 defeats an advantage of the invention and renders form creation a complex, form specific activity for a skilled programmer in which a programmer creates form specific code for each individual form. Subsequent conversion of a created XML form to RTF merely adds complexity to an already complex process. This does not in any way address the problem addressed by the claimed arrangement of enabling use of a word processing applications or RTF compatible document template understandable by non-programmers in creation of a customized form by a non-programmer. Therefore, Marchal with Muench, when taken alone or in combination, neither discloses nor suggests the "system according to claim 1, wherein said code representing said document template is at least one of, (a) word processing application compatible and (b) Rich Text Format (RTF) compatible" as recited in claim 6 of the present invention.

In view of the above remarks, Applicants respectfully submit that Marchal and Muench, when taken alone or in combination, provide no 35 USC 112 compliant enabling disclosure

that make dependent claim 6 unpatentable. Therefore, Applicants further respectfully submit that this rejection has been satisfied and should be withdrawn.

CLAIM 7

Dependent claim 7 is considered to be patentable based on its dependence on claim 1, and it is respectfully submitted that this claim is allowable for the same reasons as discussed above regarding claim 1. Claim 7 is also considered to be patentable because Marchal with Muench does not show (or suggest) a system in which "said document processor processes template document data, excluding said desired data items inserted in said placeholder items, by incorporating said template document data in said generated document and said generated document is compatible with Extensible Stylesheet Language (XSL)." Marchal, on pages 329-333 and pages 122-123, contrary to the rejection statement, nowhere mentions or suggests such features. Rather, pages 329-333 merely describe XSLT style sheet templates and pages 122-123 describe HTML and WML style sheets and associated code to generate output in a browser. The exclusion of desired data items inserted in the placeholder items is not mentioned in Marchal or Muench, when taken alone or in combination. Thus, Marchal and Muench, when taken alone or in combination, neither disclose nor suggest the "system according to claim 1, wherein said document processor processes template document data, excluding said desired data items inserted in said placeholder items, by incorporating said template document data in said generated document and said generated document is compatible with Extensible Stylesheet Language (XSL)" as recited in claim 7 of the present invention.

In view of the above remarks, Applicants respectfully submit that Marchal and Muench, when taken alone or in combination, provide no 35 USC 112 compliant enabling disclosure that make dependent claim 7 unpatentable. Therefore, Applicants further respectfully submit that this rejection has been satisfied and should be withdrawn.

CLAIM 8

Dependent claims 8 is considered to be patentable based on its dependence on claim 1, and it is respectfully submitted that these claims are allowable for the same reasons as discussed above regarding claim 1. Although Marchal describes different document formats such as XML and HTML, Marchal (with Muench) do not disclose or suggest the features claimed in claim 1 upon which claim 8 is dependent on. More specifically, Marchal with Muench does not disclose or suggest the generated document as described in claim 1 to which claim 8 is dependent upon. Thus, as Marchal with Muench, when taken alone or in combination, does not disclose or suggest the system according to claim 1, it is respectfully submitted that this rejection be withdrawn.

In view of the above remarks, Applicants respectfully submit that Marchal and Muench, when taken alone or in combination, provide no 35 USC 112 compliant enabling disclosure that make dependent claim 8 unpatentable. Therefore, Applicants further respectfully submit that this rejection has been satisfied and should be withdrawn.

CLAIM 9

Dependent claim 9 is considered to be patentable based on its dependence on claim 1, and it is respectfully submitted that these claims are allowable for the same reasons as

discussed above regarding claim 1. Furthermore, Marchal with Muench also neither discloses nor suggests an information repository as recited in claim 1 and claim 9 of the present invention. Marchal describes creating electronic forms with an editor for the purpose of collecting data. Marchal further describes writing XML code to generate documents. The code is written by a programmer and when the XML page is loaded, the result is a form that can be filled out by a user. Marchal does not locate one of the desired data items in an information repository as in the present claimed invention. Furthermore, the writing of code to fill out forms in Marchal is wholly unlike the present claimed invention in which desired data items derived from the information repository are XML compatible data items derived from an XML compatible document. Therefore, the XML document and editor described by Marchal neither discloses nor suggests the "system according to claim 1, wherein said desired data items derived from said information repository are Extensible Markup Language (XML) compatible data items derived from an XML compatible document" as recited in claim 9 of the present invention.

In view of the above remarks, Applicants respectfully submit that Marchal and Muench, when taken alone or in combination, provide no 35 USC 112 compliant enabling disclosure that make dependent claim 9 unpatentable. Therefore, Applicants further respectfully submits that this rejection has been satisfied and should be withdrawn.

CLAIM 10

Dependent claim 10 is considered to be patentable based on its dependence on claim 1, and it is respectfully submitted that this claim is allowable for the same reasons as discussed above regarding claim 1. Claim 10 is also considered to be patentable because Marchal with

Muench does not show (or suggest) a system in which "said document processor processes template document data in Rich Text Format (RTF) together with desired data items derived from said information repository in Extensible Markup Language (XML) to provide said generated document in an Extensible Stylesheet Language (XSL) format." Marchal (with Muench), on pages 129-166 or elsewhere, contrary to the rejection statement, nowhere mentions or suggests such features. As previously explained, the claimed arrangement advantageously enables use of word processing applications or RTF compatible document templates that are understandable by non-programmers in creation of a customized form by a non-programmer user. This capability is not shown or suggested in the combined references. On the contrary the two references (Marchal and Muench) are purely programmer reference guides which inherently teach the use of complex programming language. It is precisely the need of prior art form creation systems for the programming skills taught by the Marchal and Muench references that the claimed arrangement seeks to avoid. The combined references nowhere recognize the advantages of the claimed arrangement or the problem it addresses or provide any other reason or motivation for providing the claimed arrangement. Furthermore, Marchal and Muench, when taken alone or in combination, do not show or suggest an information repository as in the present claimed invention. Therefore, Marchal and Muench, when taken alone or in combination, neither disclose nor suggest the "system according to claim 1, wherein said document processor processes template document data in Rich Text Format (RTF) together with desired data items derived from said information repository in Extensible Markup Language (XML) to provide said generated document in an Extensible Stylesheet Language (XSL) format" as recited in claim 10 of the present invention.

In view of the above remarks, Applicants respectfully submit that Marchal and Muench, when taken alone or in combination, provide no 35 USC 112 compliant enabling disclosure that make dependent claim 10 unpatentable. Therefore, Applicants further respectfully submit that this rejection has been satisfied and should be withdrawn.

CLAIM 11

Dependent claim 11 is considered to be patentable based on its dependence on claims 1 and 10, and it is respectfully submitted that this claim is allowable for the same reasons as discussed above regarding claims 1 and 10. Claim 11 is also considered to be patentable because Marchal with Muench does not show (or suggest) a system in which "said document processor includes an XML parser to process said generated document in Extensible Stylesheet Language (XSL) format to provide a processed document in Rich Text Format (RTF)." Marchal (with Muench), on pages 129-166 or elsewhere, contrary to the rejection statement, nowhere mentions or suggests the features of claim 11 involving an "XML parser to process said generated document in Extensible Stylesheet Language (XSL) format to provide a processed document in Rich Text Format (RTF)." The combination of the references suggested does not produce a document in RTF format. Therefore, Marchal with Muench neither disclose nor suggest that the "document processor includes an XML parser to process said generated document in Extensible Stylesheet Language (XSL) format to provide a processed document in Rich Text Format (RTF)" as recited in claim 11 of the present invention.

In view of the above remarks, Applicants respectfully submit that Marchal and Muench, when taken alone or in combination, provide no 35 USC 112 compliant enabling disclosure

that make dependent claim 11 unpatentable. Therefore, Applicants further respectfully submit that this rejection has been satisfied and should be withdrawn.

CLAIM 12

Dependent claim 12 is considered to be patentable based on its dependence on claim 1, and it is respectfully submitted that this claim is allowable for the same reasons as discussed above regarding claim 1. Claim 12 is also considered to be patentable because Marchal with Muench does not show (or suggest) a system in which a "document processor examines said document template to identify an individual data field containing a placeholder item and incorporate a link in said individual data field identifying a corresponding item in said document generation control information, said corresponding item enabling locating one of said desired data items in said information repository for insertion in said individual data field." Marchal (with Muench), on pages 71-102 or elsewhere, contrary to the rejection statement, nowhere shows or suggests the features of claim 12. Marchal on pages 71-102 describes creating electronic forms with an editor for the purpose of collecting data. Marchal further describes writing XML code to generate documents. Figures 3-8 and 3-11 merely show forms generated by the codes in listings 3.4 and 3.5, respectively, in the above mentioned pages. The code is written by a programmer and when the XML page is loaded, the result is a form that can be filled out by a user. Marchal does not locate one of the desired data items in an information repository as in the present claimed invention. Furthermore, the writing of code to fill out forms in Marchal is wholly unlike the present claimed invention in which a document processor examines the document template to identify an individual data field containing a placeholder item and incorporate a link in the individual data field identifying a corresponding item in the document generation control information. Therefore, the XML

document and editor described by Marchal (with Muench) neither discloses nor suggests the "system according to claim 1, wherein said document processor examines said document template ... in said document generation control information, said corresponding item enabling locating one of said desired data items in said information repository for insertion in said individual data field " as recited in claim 12 of the present invention.

In view of the above remarks, Applicants respectfully submit that Marchal and Muench, when taken alone or in combination, provide no 35 USC 112 compliant enabling disclosure that make dependent claim 12 unpatentable. Therefore, Applicants further respectfully submit that this rejection has been satisfied and should be withdrawn.

CLAIM 13

Independent claim 13 is considered to be patentable for reasons given in connection with claims 1 and 6. Claim 13 recites a "graphical user interface system supporting adaptive generation of a document" comprising "an image generator for generating at least one image window including: an image element enabling user selection of a text processing application compatible document template, said document template including, data fields containing placeholder items to be replaced by desired data items, and also including a repetition identifier indicating one of said data fields is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items; and an image element for initiating examination of said document template to identify an individual data field and insert a desired data item derived from an information repository in said data field, to produce a generated document." These features are not shown or suggested in Marchal with Muench.

Marchal with Muench, either taken individually or in combination, does not show (or suggest) the feature combination of claim 13 including "an image element enabling User selection of a **text processing application**" (e.g., Word or RTF) "compatible document template." Marchal with Muench does not show (or suggest) use of a "text processing application compatible document template...including, data fields containing placeholder items to be replaced by desired data items, and also including a **repetition identifier** indicating one of said **data fields** is to be **replicated** to provide a group of data fields to be replaced by a plurality of said desired data items" as recited in the present claimed invention. The Muench XML datagram is a source of repeating data and does NOT suggest use of a "repetition identifier" initiating **creation** of repeating data. Similarly, pages 375-387 of Muench discuss using an XSL stylesheet for grouping and sorting of already created repeating data and do NOT suggest use of a "repetition identifier" initiating **creation** of repeating data. Further, Muench on pages 433-499 merely discusses processing and storing XML datagrams. Muench (with Marchal) nowhere mentions or suggests use of "a **repetition identifier** indicating one of said **data fields** is to be **replicated** to provide a group of data fields to be replaced by a plurality of said desired data items" as recited in the present claimed invention.

Marchal with Muench does not show (or suggest) a system including "an image element enabling User selection of a **text processing application**" (e.g., Word or RTF) "compatible document template." As previously explained, the claimed arrangement advantageously enables use of word processing applications or RTF compatible document templates that are understandable by non-programmers in creation of a customized form by a non-programmer user. This capability is not shown or suggested in the combined references. On the contrary, the two references (Marchal and Muench) are purely programmer reference

guides which inherently teach the use of complex programming language. It is precisely the need of prior art form creation systems for the programming skills taught by the Marchal and Muench references that the claimed arrangement seeks to avoid. The combined references nowhere recognize the advantages of the claimed arrangement or the problem it addresses or provide any other reason or motivation for providing the claimed arrangement. Rather, the cited references teach the use of complex programming skills in form creation that are in direct conflict with the purpose and function of the claimed arrangement. Use of an XML document template as suggested by the Rejection defeats an advantage of the invention and renders form creation a complex, form specific activity for a skilled programmer. Subsequent conversion of a created XML form to RTF merely adds complexity to an already complex process. This does not in any way address the problem addressed by the claimed arrangement of enabling use of a word processing applications or RTF compatible document template understandable by non-programmers in creation of a customized form by a non-programmer. Therefore, Marchal and Muench neither disclose nor suggest the features claimed in claim 13 of the present invention.

Additionally, Marchal on pages 71-102 describes creating electronic forms with an editor for the purpose of collecting data. Marchal further describes writing XML code to generate documents. Figures 3-8 and 3-11 merely show forms generated by the codes in listings 3.4 and 3.5, respectively. The code is written by a programmer and when the XML page is loaded, the result is a form that can be filled out by a user. Marchal does not mention or suggest a repetition identifier that indicates one of the data fields is to be replicated to provide a group of data fields to be replaced by a plurality of desired data items as in the present claimed invention. This is correctly admitted in the Office Action on page 5. Marchal does not derive desired data items from an information repository as in the present claimed

invention. Rather, Marchal manually receives information from a user in a form created by an XML editor, as seen in Fig. 3.1, Fig. 3.2, Fig. 3.8 and on pages 72-74. This is wholly unlike the present claimed invention which derives a desired data item from an **information repository**. Writing of code to create a user fillable form is NOT generating a document by inserting a desired data item derived from an information repository in a data field. Therefore, the XML document and editor described by Marchal neither discloses nor suggests "a graphical User interface system ... comprising: ... data fields containing placeholder items to be replaced by desired data items, and also including a repetition identifier indicating one of said data fields is to be replicated to provide a group of data fields to be replaced by plurality of said desired data items; and ... insert[ing] a desired data item derived from an information repository in said data field" as recited in claim 13 of the present invention.

In the Response to Applicants Arguments, the Office Action asserts that Marchal "teaches ... insertion of the desired data items from an information repository" on pages 71-102, particularly pages 73-84. Applicants respectfully disagree. On page 72 of the cited passage, Marchal describes creating forms with an editor such as a newspaper converting paper forms into electronic forms. Pages 73-84 of Marchal specifically show "Creating a Form with an Editor" and "Running the Project." To create a form with an editor, Marchal describes code that a programmer can use to create customized electronic forms. The programmer writes the XML code in an XML editor using markup language. The programmer may create a programming template and then customize the form as desired. For example, for the given example of converting paper forms into electronic, the programmer would create fields in a form to be filled out by a user. When the project is run, the output shows items that can be filled out by a user. This is shown in Fig. 3.4 of Marchal which shows the fields "Name" and

"Location". The user sees only this output and can click on the entity "Name" to type in "Book Fair" and the entity "Location" to type in "Exhibition Center, Namur" (see page 77). Although Marchal describes source code for a programmer to incorporate into the creation of a form and having a user manually filling the created form, Marchal does not mention or suggest an "information repository" as in the present claimed invention. Marchal merely allows a programmer to encode a form using XML and a user to fill out the created form. This is wholly unlike the present claimed invention which "insert[s] a desired data items derived an information repository in ... [the] data fields." Therefore, Marchal (with Muench) neither discloses nor suggests a "document template to ... insert a desired data item derived from an information repository in said data field, to produce a generated document" as recited in claim 13 of the present invention.

However, as stated on page 5 of the Office Action, Marchal neither discloses nor suggests the use of "repetition identifiers" which "indicat[es] one of said data fields is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items". The Office Action contends that Marchal with Muench create a form template that handles repeating data items for the obvious and beneficial purpose of expanding a form template such that it handles repeating data. Applicants respectfully disagree. Muench describes sorting and grouping already created stored data in an XML document. Muench merely sorts by "string or number values" as described on pages 375-378. Although Muench describes the "scan all preceding" (page 380) technique which checks the current element among preceding elements, Muench does not disclose or suggest a "repetition identifier" as claimed in the present invention. Furthermore, on pages 383-387, Muench also describes avoiding the scanning and rescanning method to perform a query. Sorting by string or number

values, as described in Muench, performs the same results as the "scan all preceding" method within a shorter amount of time. However, performing a sort, as described by Muench, is not the same as the present claimed invention which discloses a repetition identifier indicating that one of the data fields is to be replicated to provide a group of data fields to be replaced by a plurality of desired data items. The repetition identifier, as described in the figures and specification of the present invention, "indicat[es] that one of the data fields 201-206 is to be replicated to provide a group of data fields 201-206 to be replaced by multiple desired data items 401-406" (page 3, lines 30-31). Thus, the repetition identifier indicates that a data field containing code for insertion of information such as "First Name," "Last Name," "Age," etc. (see Fig. 2) is to be replicated to provide a group data fields which are replaced by multiple desired data items. Thus, the present claimed invention creates a document and replaces data fields, identified with a repetition identifier, with multiple desired data items. An example can be seen in Fig. 4 of the present invention. Muench is wholly unlike the present claimed invention as Muench is not concerned with replacing data fields with multiple desired data items. Muench merely sorts and groups items in a previously created document and does not mention or suggest creating a new document containing a repetition identifier as in the present claimed invention. Therefore, Muench with Marchal neither disclose nor suggest "a repetition identifier indicating one of said data field is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items" as recited in claim 1 of the present invention.

The Office Action recognizes on page 5 and page 14 that Marchal does not show or suggest use of "a repetition identifier indicating one of said data fields is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items."

However, the Office Action contradicts the above in the Response to Arguments (Office Action, page 15) which asserts that Marchal teaches code for a repetition identifier on pages 71-102, Fig. 7.7 and 7.8 and pages 208-214. Applicants respectfully submit that Marchal on page 76 mentions an XML Data Type Definition (DTD) for use in **validating** input data meets repeated data elements requirements, such DTD based **validation** does NOT suggest use of a "repetition identifier" for initiating **creation** of repeating data. As described above, the Marchal reference fails to show or suggests the features of the present claimed invention. Thus, Marchal does not show or suggest use of "a repetition identifier indicating one of said data fields is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items." However, the Rejection erroneously states it would be obvious to combine features of Muench with Marchal to produce the claimed arrangement.

The combination of the Muench XML datagram source of nested repeating data with the Marchal XML programming capabilities as suggested in the Rejection would result in a system requiring an experienced programmer capable of writing XML customized code using a specific XML datagram of nested repeating data to provide a specific customized document. The combined system would allow users to enter information data into the document for purposes such as entering ordering information into an online shopping cart and sort or group similar items. However, the combined system would **not** provide a repetition identifier that indicates one of the data fields is to be replicated to provide a group of data fields to be replaced by a plurality of desired data items as in the present claimed invention. The combined system does not even address the need for a repetition identifier, as in the present claimed invention. Thus, the combined system does not provide (or suggest) a "graphical User interface system" enabling a non-programmer user to adaptively produce a "generated

document" by using a "repetition identifier" to generate a "replicated" group of "data fields to be replaced by a plurality of said desired data items" as in claim 13 of the present invention. Consequently withdrawal of the Rejection of claim 13 under 35 USC 103(a) is respectfully requested.

In view of the above remarks, Applicants respectfully submit that Marchal and Muench, when taken alone or in combination, provide no 35 USC 112 compliant enabling disclosure that make independent claim 13 unpatentable. Therefore, Applicants further respectfully submit that this rejection has been satisfied and should be withdrawn.

CLAIM 14

Independent claim 14 is considered to be patentable for reasons given in connection with claims 1, 6 and 13. Furthermore, Marchal and Muench neither disclose nor suggest "[a] method for adaptively producing a document from information derived from an information repository, comprising the steps of: examining text processing application compatible code representing a document template" where the document template includes "data fields containing placeholder items to be replaced by desired data items" and also includes "a repetition identifier indicating one of said data fields is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items; and applying control information supporting insertion of said desired data items derived from said information repository in said data fields to replace template document data field placeholder items with desired data items, to produce a generated document" as recited in claim 14 of the present invention.

Marchal on pages 71-102 describes creating electronic forms with an editor for the purpose of collecting data. Marchal further describes writing XML code to generate documents. Figures 3-8 and 3-11 merely show forms generated by the codes in listings 3.4 and 3.5, respectively on the above mentioned pages. The code is written by a programmer and when the XML page is loaded, the result is a form that can be filled out by a user. Marchal, as correctly disclosed by the Office Action, does not teach a repetition identifier indicating data fields to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items (Rejection, page 5) as in the present claimed invention. However, Muench also does not describe this feature. Muench describes sorting and grouping already created stored data in an XML document. Muench merely sorts by "string or number values" as described on pages 375-378. Although Muench describes the "scan all preceding" (page 380) technique which checks the current element among preceding elements, Muench does not disclose or suggest a "repetition identifier" as claimed in the present invention. Furthermore, on pages 383-387, Muench also describes avoiding the scanning and rescanning method to perform a query. Sorting by string or number values, as described in Muench, performs the same results as the "scan all preceding" method within a shorter amount of time. However, performing a sort, as described by Muench, is not the same as the present claimed invention which discloses a repetition identifier indicating that one of the data fields is to be replicated to provide a group of data fields to be replaced by multiple desired data items. Muench is not concerned with replacing data fields by multiple desired data items as Muench only sorts and groups items. Furthermore, Marchal does not mention or suggest a repetition identifier that indicates one of the data fields is to be replicated to provide a group of data fields to be replaced by a plurality of desired data items as in the present claimed invention. This is correctly admitted in the Office Action on page 5. Therefore, Muench and Marchal neither

disclose nor suggest "a repetition identifier indicating one of said data field is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items" as recited in claim 14 of the present invention.

Muench on pages 470-475 merely shows processing of an XML datagram comprising a source of nested repeating data. This nowhere mentions or suggests use of "a repetition identifier" indicating "data fields" to be "replicated to provide a group of data fields to be replaced by a plurality" of "desired data items" in "code representing a document template including, data fields containing placeholder items to be replaced by desired data items" as recited in the present claimed invention. The sections relied on nowhere show use of a "repetition identifier" driving replication of "data fields" to be replaced by a plurality" of "desired data items" in "code representing a document template including, data fields containing placeholder items to be replaced by desired data items" as recited in the present claimed invention. The Muench XML datagram is a **source** of repeating data and does NOT suggest use of a "repetition identifier" initiating **creation** of repeating data as claimed ("one of said data fields is to be replicated to provide a group of data fields"). Similarly, pages 375-387 of Muench discuss using an XSL stylesheet for grouping and sorting of **already created** data and do NOT suggest use of a "repetition identifier" initiating **creation** of repeating data. Thus, the sorting of data already created as in Muench is wholly unlike the present claimed invention which discloses "a repetition identifier" that may initiate the creation of repeating data. Furthermore, Muench on pages 433-499 discusses processing and storing XML datagrams. Muench (with Marchal) nowhere mentions or suggests use of "a repetition identifier" indicating "data fields" to be "replicated to provide a group of data fields to be replaced by a plurality" of "desired data items" in "code representing a document template including, data

fields containing placeholder items to be replaced by desired data items" as in claim 14 of the present invention.

Furthermore, the system described by Marchal, on pages 71-102, particularly pages 73-84, does not contain a document processor for applying the control information as in the present claimed invention. Marchal merely allows a user to fill forms in a document and does not replace template document data field place holder items with desired data items as in the present invention, and thus, Marchal neither discloses nor suggests "applying control information supporting insertion of said desired data items derived from said information repository in said data fields to replace template document data field placeholder items with desired data items, to produce a generated document" as recited in claim 14 of the present invention.

The combination of the Muench XML datagram source of nested repeating data with the Marchal XML programming capabilities as suggested in the Rejection would result in a system requiring an experienced programmer capable of writing XML customized code using a specific XML datagram of nested repeating data to provide a specific customized document. The combined system would allow users to enter information data into the document for purposes such as entering ordering information into an online shipping cart and sort or group similar items. However, the combined system would not provide a repetition identifier that indicates one of the data fields is to be replicated to provide a group of data fields to be replaced by a plurality of desired data items as in the present claimed invention. The combined system does not even address the need for a repetition identifier, as in the present claimed invention. Thus, the combined system does not provide (or suggest) a "method"

enabling a non-programmer user to "adaptively ... [produce] a document" by using a "repetition identifier" indicating one of the data fields is to be "replicated to provide a group of data fields to be replaced by a plurality of said desired data items" as in claim 14 of the present invention. Consequently withdrawal of the Rejection of claim 14 under 35 USC 103(a) is respectfully requested.

In view of the above remarks, Applicants respectfully submits that Marchal and Muench, when taken alone or in combination, provide no 35 USC 112 compliant enabling disclosures that makes independent claim 14 unpatentable. Therefore, Applicants further respectfully submit that this rejection has been satisfied and should be withdrawn.

CLAIM 15

Independent claim 15 is considered to be patentable for reasons given in connection with claims 1, 6 and 13. Additionally, Marchal with Muench, when taken individually or in combination, neither discloses nor suggests a "method for adaptively producing a document comprising the steps of: receiving a text processing application compatible electronic document template including: data fields having placeholder items, and at least one repetition identifier indicating at least one of said data fields that is to be replicated; receiving data items and merging said electronic document template with said data items to produce the document responsive to replacing placeholder items with said data items, and responsive to replacing the at least one of said data fields that is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items" as recited in claim 15 of the present invention.

Marchal on pages 71-102 describes creating electronic forms with an editor for the purpose of collecting data. Marchal further describes writing XML code to generate documents. Figures 3-8 and 3-11 merely show forms generated by the codes in listings 3.4 and 3.5, respectively on the above mentioned pages. The code is written by a programmer and when the XML page is loaded, the result is a form that can be filled out by a user. Marchal, as correctly disclosed by the Office Action, does not teach a repetition identifier indicating data fields to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items (Rejection, page 5) as in the present claimed invention. However, Muench also does not describe this feature. Muench describes sorting and grouping already created stored data in an XML document. Muench merely sorts by "string or number values" as described on pages 375-378. Although Muench describes the "scan all preceding" (page 380) technique which checks the current element among preceding elements, Muench does not disclose or suggest a "repetition identifier" as claimed in the present invention. Furthermore, on pages 383-387, Muench also describes avoiding the scanning and rescanning method to perform a query. Sorting by string or number values, as described in Muench, performs the same results as the "scan all preceding" method within a shorter amount of time. However, performing a sort, as described by Muench, is not the same as the present claimed invention which discloses a repetition identifier indicating at least one of the data fields is to be replicated and replicating at least one of the data fields that is to be replicated to provide a group of data fields to be replaced by a plurality of desired data items. Muench is not concerned with replacing data fields by multiple desired data items as Muench only sorts and groups items. Therefore, Muench and Marchal neither disclose nor suggest "...at least one repetition identifier indicating at least one of said data fields that is to be replicated ... [and] replicating the at least one of said data fields that is to be replicated to provide a group of data

fields to be replaced by a plurality of said desired data items" as recited in claim 15 of the present invention.

Muench on pages 470-475 merely shows processing of an XML datagram comprising a source of nested repeating data. This nowhere mentions or suggests use of "at least one repetition identifier indicating at least one of said data fields that is to be replicated" and "replacing placeholder items with" the "data items" and "replicating the at least one of said data fields that is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items" as recited in claim 15 of the present invention. The sections relied on nowhere show use of a "repetition identifier" as in the present claimed invention. The Muench XML datagram is a **source** of repeating data and does NOT suggest use of a "repetition identifier" initiating **creation** of repeating data as claimed ("one of said data fields that is to be replicated to provide a group of data fields"). Similarly, pages 375-387 of Muench discuss using an XSL stylesheet for grouping and sorting of **already created** data and do NOT suggest use of a "repetition identifier" initiating **creation** of repeating data. Thus, the sorting of data already created as in Muench is wholly unlike the present claimed invention which discloses "a repetition identifier" that may initiate the creation of repeating data. Furthermore, Muench on pages 433-499 discusses processing and storing XML datagrams. Muench (with Marchal) nowhere mentions or suggests use of "a repetition identifier" indicating at least one of said data fields that is to be replicated" and "replacing placeholder items with" the "data items" and "replicating the at least one of said data fields that is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items" as in claim 15 of the present invention.

It is the claim 15 arrangement that advantageously enables use of word processing applications or RTF compatible document templates that are understandable by non-programmers in creation of a customized form by a non-programmer user. The claim 15 arrangement is not shown or suggested in the references when taken alone or combined. On the contrary, the two references (Marchal and Muench) are purely programmer reference guides which inherently teach the use of complex programming language. It is precisely the need of prior art form creation systems, for the programming skills taught by the Marchal and Muench references, that the claimed arrangement seeks to avoid. The combined references nowhere recognize the advantages of the claimed arrangement or the problem it addresses or provide any other reason or motivation for providing the claimed arrangement. Rather, the cited references teach the use of complex programming and skills in form creation that are in direct conflict with the purpose and function of the claimed arrangement.

The Office Action recognizes on page 5 and page 14 that Marchal does not show or suggest use of "a repetition identifier indicating one of said data fields is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items." However, the Rejection erroneously states it would be obvious to combine features of Muench with Marchal to produce the claimed arrangement.

The combination of the Muench XML datagram source of nested repeating data with the Marchal XML programming capabilities as suggested in the Rejection would result in a system requiring an experienced programmer capable of writing XML customized code using a specific XML datagram of nested repeating data to provide a specific customized document. The combined system would allow users to enter information data into the document for

purposes such as entering ordering information into an online shipping cart and sort or group similar items. However, the combined system would not provide at least one repetition identifier that indicates at least one of the data fields is to be replicated and replicating the at least one of the data fields that is to be replicated to provide a group of data fields to be replaced by a plurality of desired data items as in the present claimed invention. The combined system does not even address the need for a repetition identifier, as in the present claimed invention. Thus, the combined system does not provide (or suggest) a "method" enabling a non-programmer user to "adaptively ... [produce] a document" by using a "repetition identifier" indicating one of the data fields is to be replicated and "replicating the at least one of said data fields that is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items" as in claim 15 of the present invention. Consequently withdrawal of the Rejection of claim 15 under 35 USC 103(a) is respectfully requested.

In view of the above remarks, Applicants respectfully submit that Marchal and Muench, when taken alone or in combination, provide no 35 USC 112 compliant enabling disclosures that makes independent claim 15 unpatentable. Therefore, Applicants further respectfully submit that this rejection has been satisfied and should be withdrawn.

CLAIM 16

Dependent claim 16 is considered to be patentable based on its dependence on claim 15, and it is respectfully submitted that this claim is allowable for the same reasons as discussed above regarding claim 15. Claim 16 is also considered to be patentable because Marchal with Muench, either taken alone or in combination, does not show (or suggest) a

system in which the "step of merging is performed by at least one of, (a) XSL compatible code and (b) a mail merge application program." Merely mentioning XSL does not produce the method recited in claim 16 of the present invention. Therefore, Marchal (with Muench) nowhere mentions or suggests the features of claim 16. Thus, Marchal with Muench, when taken alone or in combination neither discloses nor suggests a "method for producing a document according to claim 15, wherein said step of merging is performed by at least one of, (a) XSL compatible code and (b) a mail merge application program" as recited in claim 16 of the present invention.

In view of the above remarks, Applicants respectfully submit that Marchal and Muench, when taken alone or in combination, provide no 35 USC 112 compliant enabling disclosure that make dependent claim 16 unpatentable. Therefore, Applicants further respectfully submit that this rejection has been satisfied and should be withdrawn.

CLAIM 17

Dependent claim 17 is considered to be patentable based on its dependence on claim 15, and it is respectfully submitted that this claim is allowable for the same reasons as discussed above regarding claim 15. Claim 17 is also considered to be patentable because Marchal with Muench does not show (or suggest) a method involving "receiving a selection of text processing application compatible" (e.g. Word or RTF) "electronic document templates; and receiving a selection of a source of the data items." Marchal with Muench nowhere contemplates or suggests use of "text processing application compatible electronic document templates" or recognizes the problem of facilitating form creation by a non-programmer that this feature addresses. The claimed arrangement advantageously enables use of word

processing applications or RTF compatible document templates that are understandable by non-programmers in creation of a customized form by a non-programmer user. This capability is not shown or suggested in the combined references. On the contrary, the two references (Marchal and Muench) are purely programmer reference guides which inherently teach the use of complex programming language. It is precisely the need of prior art form creation systems for the programming skills taught by the Marchal and Muench references that the claimed arrangement seeks to avoid. The combined references nowhere recognize the advantages of the claimed arrangement or the problem it addresses or provide any other reason or motivation for providing the claimed arrangement. Rather, the cited references teach the use of complex programming skills in form creation that are in direct conflict with the purpose and function of the claimed arrangement. Use of an XML document template defeats an advantage of the invention and renders form creation a complex, form specific activity for a skilled programmer. Subsequent conversion of a created XML form to RTF merely adds complexity to an already complex process. This does not in any way address the problem addressed by the claimed arrangement of enabling use of a word processing applications or RTF compatible document template understandable by non-programmers in creation of a customized form by a non-programmer. Thus, Marchal with Muench, when taken alone or in combination, neither discloses nor suggests "[a] method for producing a document according to claim 15, further comprising the steps of: receiving a selection of text processing application compatible electronic document templates; and receiving a selection of a source of the data items" as recited in 17 of the present invention.

In view of the above remarks, Applicants respectfully submit that Marchal and Muench, when taken alone or in combination, provide no 35 USC 112 compliant enabling disclosure

that makes dependent claims 17 unpatentable. Therefore, Applicants further respectfully submit that this rejection has been satisfied and should be withdrawn.

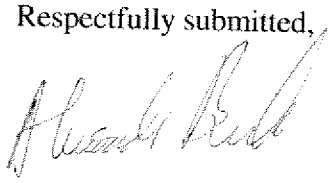
In view of the above remarks, Applicants respectfully submit that Marchal and Muench, when taken alone or in combination, provide no 35 USC 112 compliant enabling disclosure that makes claims 1-17 unpatentable. Therefore, Applicants further respectfully submit that this rejection has been satisfied and should be withdrawn.

VIII. CONCLUSION

Marchal and Muench, when taken alone or in any combination, neither disclose nor suggest a document generation system for producing a document from information derived from an information repository as in the present claimed invention. Specifically, Marchal and Muench fail to disclose or suggest a source of code representing a document template including data fields containing placeholder items to be replaced by desired data items and also including a repetition identifier indicating one of the data fields is to be replicated to provide a group of data fields to be replaced by a plurality of the desired data items as in the present claimed invention. Additionally, Marchal with Muench neither disclose nor suggest "a source of document generation control information supporting insertion of" the "desired data items derived from said information repository in said data fields; and a document processor for applying said control information in replacing template document data field placeholder items with desired data items, to produce a generated document" as in the present claimed invention.

Accordingly it is respectfully submitted that the rejection of claims 1– 17 be reversed.

Respectfully submitted,



Date: March 5, 2007

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APPENDIX I - APPEALED CLAIMS

1. (Original) A document generation system for producing a document from information derived from an information repository, comprising:

a source of code representing a document template including, data fields containing placeholder items to be replaced by desired data items, and also including a repetition identifier indicating one of said data fields is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items;

a source of document generation control information supporting insertion of said desired data items derived from said information repository in said data fields; and

a document processor for applying said control information in replacing template document data field placeholder items with desired data items, to produce a generated document.

2. (Original) The system according to claim 1, wherein

said control information contains at least one of, (a) an identification of data fields in said template document available to be replaced by desired data items, (b) an identification of a location in said information repository of a desired data item associated with an individual data field, and (c) an identification of a location in said information repository of a first data item for insertion in said individual data field of said group of data fields and data items sequentially linked to said first data item are inserted in remaining data fields of said group of data fields.

3. (Original) The system according to claim 2, wherein

said location identifier of said first data item comprises an Extensible Markup Language compatible XPath value.

4. (Previously Amended) The system according to claim 1, including

a data source file associating data field names of said document template with a data location in an information repository, said data source file comprising at least one of, (a) a comma delimited file and (b) a flat file.

5. (Original) The system according to claim 1, wherein

said repetition identifier comprises a Rich Text Format (RTF) compatible Bookmark.

6. (Previously Amended) The system according to claim 1, wherein

said code representing said document template is at least one of, (a) word processing application compatible and (b) Rich Text Format (RTF) compatible.

7. (Original) The system according to claim 1, wherein

said document processor processes template document data, excluding said desired data items inserted in said placeholder items, by incorporating said template document data in said generated document and said generated document is compatible with Extensible Stylesheet Language (XSL).

8. (Original) The system according to claim 1, wherein said generated document comprises one or more of, (a) an SGML document, (b) an XML document, (c) an HTML document, and (d) a multimedia file.

9. (Original) The system according to claim 1, wherein

said desired data items derived from said information repository are Extensible Markup Language (XML) compatible data items derived from an XML compatible document.

10. (Original) The system according to claim 1, wherein

said document processor processes template document data in Rich Text Format (RTF) together with desired data items derived from said information repository in Extensible Markup Language (XML) to provide said generated document in an Extensible Stylesheet Language (XSL) format.

11. (Original) The system according to claim 10, wherein

said document processor includes an XML parser to process said generated document in Extensible Stylesheet Language (XSL) format to provide a processed document in Rich Text Format (RTF).

12. (Original) The system according to claim 1, wherein

said document processor examines said document template to identify an individual data field containing a placeholder item and incorporate a link in said individual data field identifying a corresponding item in said document generation control information, said corresponding item enabling locating one of said desired data items in said information repository for insertion in said individual data field.

13. (Previously Amended) A graphical User interface system supporting adaptive generation of a document, comprising:

an image generator for generating at least one image window including:

an image element enabling User selection of a text processing application compatible document template, said document template including, data fields containing placeholder items to be replaced by desired data items, and also including a repetition identifier indicating one of said data fields is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items; and

an image element for initiating examination of said document template to identify an individual data field and insert a desired data item derived from an information repository in said data field, to produce a generated document.

14. (Previously Amended) A method for adaptively producing a document from information derived from an information repository, comprising the steps of:

examining text processing application compatible code representing a document template, said document template including, data fields containing placeholder items to be replaced by desired data items, and also including a repetition identifier indicating one of said data fields is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items; and

applying control information supporting insertion of said desired data items derived from said information repository in said data fields to replace template document data field placeholder items with desired data items, to produce a generated document.

15. (Previously Amended) A method for adaptively producing a document comprising the steps of:

receiving a text processing application compatible electronic document template including:

data fields having placeholder items, and

at least one repetition identifier indicating at least one of said data fields that is to be replicated;

receiving data items; and

merging said electronic document template with said data items to produce the document responsive to replacing placeholder items with said data items, and responsive to replicating the at least one of said data fields that is to be replicated to provide a group of data fields to be replaced by a plurality of said desired data items.

16. (Original) A method for producing a document according to claim 15, wherein said step of merging is performed by at least one of, (a) XSL compatible code and (b) a mail merge application program.

17. (Previously Amended) A method for producing a document according to claim 15, further comprising the steps of:

receiving a selection of text processing application compatible electronic document templates; and

receiving a selection of a source of the data items.

APPENDIX II - EVIDENCE

Applicant does not rely on any additional evidence other than the arguments submitted hereinabove.

APPENDIX III - RELATED PROCEEDINGS

Applicant respectfully submits that there are no proceedings related to this appeal in which any decisions were rendered.

APPENDIX IV - TABLE OF CASES

1. *In re Howard*, 394 F. 2d 869, 157 USPQ 615, 616 (CCPA 1968)
2. 29 AM. Jur 2D Evidence S. 33 (1994)
3. *In re Ahlert*, 424 F. 2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970)
4. *In re Eynde*, 480 F. 2d 1364, 1370; 178 USPQ 470, 474 (CCPA 1973)
5. *In re Fine*, 5 USPQ 2d 1600, (Fed Cir. 1988)
6. ACS Hospital Systems Inc v. Montefiore Hospital, 221 USPQ 929,933 (Fed. Cir. 1984)
7. *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (CCPA 1966)
8. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed.Cir. 1988), *cert. denied*, 488 U.S. 825 (1988)
9. *Ashland Oil Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 28, 293, 227 USPQ 657, 664 (Fed.Cir. 1985), *cert. denied*, 475 U.S. 1017 (1986)
10. *In re Oetiker*, 977 F2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992)

APPENDIX V - LIST OF REFERENCES

Book Author	Title	Publisher and Publication Year	102(e) Date
Marchal	Applied XML Solutions	Sam's, 2000	
Muench	Building Oracle XML Applications	O'Reilly & Associates, 2000	

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